WHAT IS CLAIMED IS:

1   1.   An apparatus comprising:

2   a UI view definition for a user interface; and

3   a UI view manager operable to dynamically generate the user interface from

4   the UI view definition, wherein the UI view manager instantiates a

5   wrapped control as part of the user interface.

1   2.   The apparatus of claim 1 wherein

2   the wrapped control comprises:

3   a control; and

4   a wrapper;

5   and

6   the UI view manager instantiates the wrapped control by providing the control

7   as part of the user interface using the wrapper.

1   3.   The apparatus of claim 1 wherein

2   the user interface comprises a plurality of controls, the wrapped control being

3   one of the controls.

1   4.   The apparatus of claim 1 wherein

2   the UI view manager is operable to dynamically add a new wrapped control to

3   the user interface.

1   5.   The apparatus of claim 1 wherein

2   the user interface includes a plurality of controls; and

3   the UI view manager is operable to dynamically remove an existing control of

4   the controls from the user interface.

1   6.   The apparatus of claim 1 wherein

2   the UI view manager is operable to dynamically change a function of the

3   wrapped control.

1   7.   The apparatus of claim 1 further comprising:

2   a UI container, wherein

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3   the user interface is provided within an environment provided by the

4   UI container.

1   8.   The apparatus of claim 1 wherein

2   the UI view manager provides the wrapped control as part of the user interface

3   by including a user interface element of the wrapped control in the user

4   interface.

1   9.   The apparatus of claim 1 wherein the UI view manager instantiates the

2   wrapped control as part of the user interface by:

3   providing functionality of the wrapped control to be performed in response to

4   activating a user interface element of the wrapped control in the user

5   interface.

1   10.   The apparatus of claim 1 wherein the wrapped control comprises:

2   code to implement a control interface, wherein the implementation of the

3   control interface enables the UI view manager to invoke some behavior

4   of the wrapped control by invoking methods of the implementation of

5   the control interface.

1   11.   The apparatus of claim 1 wherein

2   the UI view manager contains an implementation of a UI view interface and

3   the wrapped control invokes function of the UI view interface implementation

4   of the UI view interface to communicate with the UI view manager.

1   12.   The apparatus of claim 1 wherein

2   the UI view manager is operable to dynamically generate the user interface in

3   response to a change to the UI view definition.

1   13.   The apparatus of claim 1 further comprising:

2   a user interface designer for providing a UI view definition.

1   14.   The apparatus of claim 1 wherein

2   the UI view definition corresponds to an XML file.

1   15.   The apparatus of claim 1 wherein

2   the UI view definition comprises a control definition for the wrapped control,

3   wherein the control definition specifies a user interface element of the

4   wrapped control and a program identifier of code to provide

5   functionality of the wrapped control.

1   16.   The apparatus of claim 1 wherein

2   the UI view definition comprises a panel definition for a panel of the user

3   interface.

1   17.   The apparatus of claim 16 wherein

2   the panel definition comprises a control definition for a control to be presented

3   in the panel, wherein the control definition specifies a user interface

4   element of the control and a program identifier of code to provide

5   functionality of the control.

1   18.   A method for providing a user interface comprising:

2   generating a user interface from a UI view definition and dynamically editing

3   the user interface,

4   wherein

5   the generating includes creating a wrapper for generating a wrapped

6   control as part of the user interface.

1   19.   The method of claim 18 further comprising:

2   dynamically adding a new wrapped control to the user interface.

1   20.   The method of claim 18 further comprising:

2   dynamically changing a function of the wrapped control.

1   21.   The method of claim 18 further comprising:

2   dynamically removing an existing wrapped control from the user interface.

1   22.   The method of claim 18 further comprising:

2   sending a message to the wrapped control via a control interface associated

3   with the wrapper.

1   23.   The method of claim 18 further comprising:

2   receiving a message from the wrapped control via a UI view interface

3   associated with a UI view manager.

1   24.   The method of claim 18 wherein creating a wrapper comprises:

2   implementing at least one function of a control interface.

1   25.   The method of claim 24 wherein the at least one function is selected

2 from the set a first function to cause the control to read its internal data, a second

3 function to cause the control to load a property of the control from the UI view

4 definition, a third function to save a property of the control to the UI view definition,

5 a fourth function to return a license key for the control, a fifth function to initialize a

6 property of the control, and a sixth function to receive a notification about a user

7 interface event.

1   26.   The method of claim 18 further comprising:

2   generating a UI view manager by implementing at least one function of an IUI

3   view interface the function selected from the set a first function

4   returning a table of references to business objects, a second function

5   returning a parameter to provide scope of access to a control of the

6   user interface, a third function to register a control for providing alarm

7   information to the control, a fourth function to deregister a control to

8   terminate providing alarm information to the control, a fifth function to

9   create a user interface panel for housing controls, a sixth function to

10   create a user interface panel for adding a control to a user interface

11   panel, a seventh function to remove a panel from the user interface, an

12   eight function to remove a control from a user interface panel, a ninth

13   function to activate or deactive a control, a tenth function to display a

14   text message of a control on a status message panel.

1   27.   A computer system comprising:

2   a processor;

3   a display screen, coupled to said processor;

4   computer readable medium coupled to said processor; and

5   computer code, encoded in said computer readable medium,

6   configured to cause said processor to dynamically generate a user

7   interface from a UI view definition on the display screen,

8   by virtue of being configured to cause said processor to:

9   use a wrapper to generate a wrapped control as part of the user

10   interface.

1   28.   The computer system of claim 24 wherein

2   said processor is further configured to dynamically add a new wrapped control

3   to the user interface.

1   29.   The computer system of claim 24 wherein

2   said processor is further configured to dynamically change a function of the

3   wrapped control.

1   30.   The computer system of claim 24 wherein

2   said processor is further configured to dynamically remove an existing

3   wrapped control from the user interface.

1   31.   The computer system of claim 24 wherein

2   said processor is further configured to dynamically send a message to the

3   wrapped control via a control interface associated with the wrapper.

1   32.   The computer system of claim 24 wherein

2   said processor is further configured to dynamically receive a message from the

3   wrapped control via a UI view interface associated with a UI view

4   manager.

1   33.   A computer program product comprising:

2   generating instructions to dynamically generate a user interface from a UI

3   view definition, wherein

4   the generating instructions include using instructions for using a

5   wrapper to generate a wrapped control as part of the user

6   interface;

7   and

8   a computer-readable medium that stores the generating instructions and the

9   using instructions.

1   34. The computer program product of claim 33 further comprising:

2 adding instructions to dynamically add a new wrapped control to the user

3   interface;

4 and wherein

5 the computer-readable medium further stores the adding instructions.

1   35. The computer program product of claim 33 further comprising:

2 changing instructions to dynamically change a function of the wrapped

3   control;

4 and wherein

5 the computer-readable medium further stores the changing instructions.

1   36. The computer program product of claim 33 further comprising:

2 removing instructions to dynamically remove an existing wrapped control

3   from the user interface;

4 and wherein

5 the computer-readable medium further stores the removing instructions.

1   37. The computer program product of claim 33 further comprising:

2 sending instructions to send a message to the wrapped control via a control

3   interface associated with the wrapper;

4 and wherein

5 the computer-readable medium further stores the sending instructions.

1   38. The computer program product of claim 33 further comprising:

2 receiving instructions to receive a message from the wrapped control via a UI

3   view interface associated with a UI view manager;

4 and wherein

5 the computer-readable medium further stores the receiving instructions.

1   39. An apparatus comprising:

2 generating means for dynamically generating a user interface from a UI view

3   definition,

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4   wherein

5   the generating means includes using means for using a wrapper for generating

6   a wrapped control as part of the user interface.

1   40. The apparatus of claim 39 further comprising:

2   adding means for dynamically adding a new wrapped control to the user

3   interface.

1   41. The apparatus of claim 39 further comprising:

2   changing means for dynamically changing a function of the wrapped control.

1   42. The apparatus of claim 39 further comprising:

2   removing means for dynamically removing an existing wrapped control from

3   the user interface.

1   43. The apparatus of claim 39 further comprising:

2   sending means for sending a message to the wrapped control via a control

3   interface associated with the wrapper.

1   44. The apparatus of claim 39 further comprising:

2   receiving means for receiving a message from the wrapped control via a UI

3   view interface associated with a UI view manager.

1   45. A system comprising:

2   a wrapped control; and

3   a UI view manager, wherein

4   the UI view manager dynamically provides the wrapped control as part

5   of a user interface.

1   46. A system comprising:

2   a wrapped control comprising:

3   a control; and

4   a wrapper around the control;

5   and

6   a UI view manager, wherein

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7   the UI view manager uses the wrapper to dynamically provide the

8   control as part of a user interface.

1   47.   A signal embodied in a carrier wave comprising:

2   generating instructions to dynamically generate a user interface from a UI

3   view definition, wherein

4   the generating instructions include using instructions for using a

5   wrapper to generate a wrapped control as part of the user

6   interface.

1   48.   A signal embodied in a carrier wave comprising:

2   a user interface 100 produced by generating instructions to dynamically

3   generate the user interface from a UI view definition, wherein

4   the generating instructions include using instructions for using a

5   wrapper to generate a wrapped control as part of the user

6   interface.

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